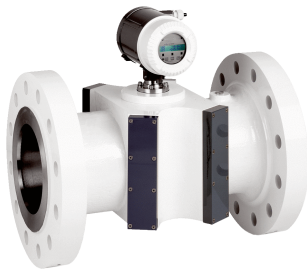


FLOWSIC600

Gas flow meters for custody transfer and process applications

GAS FLOW METERS

SICK
Sensor Intelligence.



Technical data overview

Measured values	Volumetric flow a. c., volume a. c., gas velocity, sound velocity
Measurement principle	Ultrasonic transit time difference measurement
Number of measuring paths	2, 4, 4+1, 4+4
Hazardous area	1G 2G Class I Division 1 Class I Division 2
Measuring ranges	Measuring ranges depend on nominal pipe size
Gas temperature	-40 °C ... +105 °C On request: -194 °C ... +280 °C
Operating pressure	0 bar (g) ... 250 bar (g) On request: 450 bar (g)
Nominal pipe size	2 " ... 48 " (DN 50 ... DN 1200)
Conformities	AGA-Report Nr. 9 API 21.1 OIML D 11:2013 OIML R 137-1:2006 ISO 17089-1 BS 7965
Enclosure rating	IP65 / IP66 / IP67
Modbus	✓, ✓
Modbus	
Type of fieldbus integration	ASCII RS-485 (2x) RTU RS-485 (2x)
HART	✓
Diagnostics functions	Integrated device diagnostics and enhanced diagnostics via MEPAFLOW600 CBM software

Product description

The FLOW SIC600 measurement device is an ultrasonic gas flow meter and sets the standard in its market segment for custody transfer of natural gas as well as steam flow measurement. The visually technical design demonstrates that it is geared to the tough industry conditions. The compact design with integrated cable routing means that the measuring system is rugged, insensitive to interference, low-maintenance, and has long-term stability. The FLOW SIC600 features extensive diagnostics options to allow detection of malfunctions even before the measurement is affected. Versions with 2, 4, 4 + 1, or 4 + 4 measuring paths enable a variety of process applications, including custody transfer measurements.

At a glance

- Highly efficient ultrasonic transducer - up to gas temperatures of 280 °C and pressures up to 450 bar
- Direct path layout
- Intelligent self-diagnostics
- Compact, robust design
- Integrated log book and data logger
- Large measuring range 1:120
- Bidirectional measurement
- Low power consumption: <1 W

Your benefits

- Long-term stability, reliable measurement
- Low maintenance due to intelligent self-diagnostics
- Virtually immune to pressure regulator noise
- Ultrasonic transducers can be exchanged under operating pressure
- Wide application range

Fields of application

- Custody transfer applications (natural gas, N₂, O₂, air, ethylene)
- Onshore and offshore applications
- Steam flow measurement
- Underground gas storage facilities (bidirectional measurement possible)
- Cryogenic gas applications down to -194 °C
- Also for process gases
- For gas with high H₂S component such as sour gas or biogas

Ordering information

Other models and accessories → www.sick.com/FLWSIC600

- **Product segment:** Flow measurement technology
- **Product family group:** Gas flow meters
- **Product family:** FLWSIC600
- **Measurement principle:** Ultrasonic transit time difference measurement
- **Measured values:** volumetric flow a. c., volume a. c., gas velocity, sound velocity
- **Number of measuring paths:** 2, 4, 4+1, 4+4
- **Measuring medium:** natural gas, N₂, O₂, air, C₂H₄, steam, process gases
- **Ex area category:** 1G, 2G, Ga, Gb, Class I Division 1, Class I Division 2
- **Conformities:** AGA-Report Nr. 9, API 21.1, OIML D 11:2013, OIML R 137-1:2006, ISO 17089-1, BS 7965
- **Communication interface:** Modbus, Modbus, HART
- **Communication Interface detail:** ASCII RS-485, RTU RS-485
- **Nominal pipe size min.:** ≥ 2 "
- **Nominal pipe size max.:** ≤ 48 "
- **Process temperature min.:** ≥ -40 °C, ≥ -194 °C

Process temperature max.	Operating pressure min.	Operating pressure max.	Enclosure rating	Type	Part no.
≤ +105 °C ≤ +280 °C	≥ 0 bar (g) ≥ 450 bar (g)	≤ 250 bar (g) ≤ 450 bar (g)	IP65 / IP66 / IP67	FLWSIC600	On request

SICK AT A GLANCE

SICK is one of the leading manufacturers of intelligent sensors and sensor solutions for industrial applications. A unique range of products and services creates the perfect basis for controlling processes securely and efficiently, protecting individuals from accidents and preventing damage to the environment.

We have extensive experience in a wide range of industries and understand their processes and requirements. With intelligent sensors, we can deliver exactly what our customers need. In application centers in Europe, Asia and North America, system solutions are tested and optimized in accordance with customer specifications. All this makes us a reliable supplier and development partner.

Comprehensive services complete our offering: SICK LifeTime Services provide support throughout the machine life cycle and ensure safety and productivity.

For us, that is “Sensor Intelligence.”

WORLDWIDE PRESENCE:

Contacts and other locations –www.sick.com